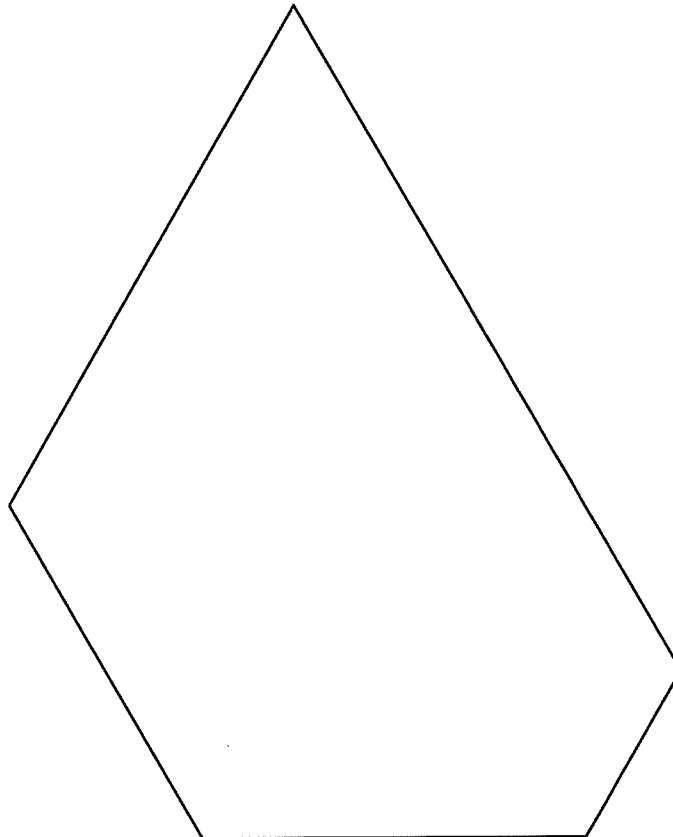




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### Cover It

- Use pattern blocks to cover the figure below. You may only use equilateral triangles, blue rhombi, trapezoids, and hexagons.
- Once you have covered the figure with non-overlapping pattern blocks, sketch your results on the figure.



- 1 If the area of 1 equilateral triangle is 1 square unit, what is the area of 1 blue rhombus?
- 2 If the area of 1 equilateral triangle is 1 square unit, what is the area of 1 trapezoid?
- 3 If the area of 1 equilateral triangle is 1 square unit, what is the area of 1 hexagon?
- 4 If the area of 1 equilateral triangle is 1 square unit, what is the total area of the figure?



# Unit 1 Lesson 1

## Cover It

- 5 If the area of 1 equilateral triangle is 1 square unit, complete the table based on the number of pattern blocks you used to cover the figure.

Area Relationships of Pattern Blocks

Pattern Block	Area of the pattern block (square units)	Number of pattern blocks used	<u>Total</u> area of pattern blocks used (square units)	Area of pattern blocks used Total area of figure	Decimal representation of total area	Percent of total area
Equilateral triangle	1					
Blue rhombus						
Trapezoid						
Hexagon						



## My Head is Spinning

- 1 a) Spin each spinner (Spinner 1 and Spinner 2), record the numbers in the blanks, and complete the comparison statement.

<u>Spinner 1</u>	<u>Spinner 2</u>	<u>Comparison</u>
_____	_____	_____ < _____
_____	_____	_____ < _____
_____	_____	_____ > _____

- b) What procedure did you use to compare the values on Spinner 1 and Spinner 2?

- 2 a) Spin each spinner (Spinner 3 and Spinner 4), record the numbers in the blanks, and complete the comparison statement.

<u>Spinner 3</u>	<u>Spinner 4</u>	<u>Comparison</u>
_____	_____	_____ > _____
_____	_____	_____ > _____
_____	_____	_____ < _____

- b) What procedure did you use to compare the values on Spinner 3 and Spinner 4?

- 3 a) Spin Spinner 1 twice and Spinner 2 once and record the numbers in the blanks. Then arrange the 3 numbers in order from least to greatest. If you spin the same number twice, you will need to spin until you spin a different number.

<u>Spinner 1</u>	<u>Spinner 1</u>	<u>Spinner 2</u>	<u>Order from least to greatest</u>
_____	_____	_____	_____
_____	_____	_____	_____

- b) What procedure did you use to arrange the numbers from Spinner 1 and Spinner 2 in order from least to greatest?



## Unit 1 Lesson 1

### My Head is Spinning

- 4 a) Spin Spinner 1 twice and Spinner 2 twice and record the numbers in the blanks. Then arrange the 4 numbers in order from greatest to least. If you spin the same number twice, you will need to spin until you spin a different number.

<u>Spinner 1</u>	<u>Spinner 1</u>	<u>Spinner 2</u>	<u>Spinner 2</u>	<u>Order from greatest to least</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

- b) What procedure did you use to arrange the numbers from Spinner 1 and Spinner 2 in order from greatest to least?

- 5 a) Spin Spinner 3 twice and Spinner 4 twice and record the numbers in the blanks. Then arrange the 4 numbers in order from least to greatest. If you spin the same number twice, you will need to spin until you spin a different number.

<u>Spinner 3</u>	<u>Spinner 3</u>	<u>Spinner 4</u>	<u>Spinner 4</u>	<u>Order from least to greatest</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

- b) What procedure did you use to arrange the numbers from Spinner 3 and Spinner 4 in order from least to greatest?

- 6 a) Spin Spinner 1 twice and Spinner 4 twice and record the numbers in the blanks. Then arrange the 4 numbers in order from greatest to least. If you spin the same number twice, you will need to spin until you spin a different number.

<u>Spinner 1</u>	<u>Spinner 1</u>	<u>Spinner 4</u>	<u>Spinner 4</u>	<u>Order from greatest to least</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

- b) What procedure did you use to arrange the numbers from Spinner 3 and Spinner 4 in order from greatest to least?



## Independent Practice

**Comparing fractions and decimals:** Rewrite all numbers so they are in the same form (either all decimals or all fractions with a common denominator).

Example: Compare 0.3 and  $\frac{3}{8}$ .

Rewriting as fractions: 0.3 is three tenths or  $\frac{3}{10}$ .

The common denominator for  $\frac{3}{10}$  and  $\frac{3}{8}$  is 40; so  $\frac{3}{10} = \frac{12}{40}$  and  $\frac{3}{8} = \frac{15}{40}$ . Since  $\frac{12}{40} < \frac{15}{40}$ ,  
 $0.3 < \frac{3}{8}$ .

Rewriting as decimals:  $\frac{3}{8} = \frac{375}{1000}$  or 0.375. Both 0.3 and 0.375 have the same digit in the tenths place. When I compare the digits in the hundredths place, 0.3 must have a zero written in the hundredths place. Now I can compare 0.30 and 0.37. Since  $0 < 7$ , I know that  $0.3 < 0.375$ , or  $0.3 < \frac{3}{8}$ .

**Arranging fractions and decimals in order:** Rewrite all numbers so they are in the same form (either all decimals or all fractions with a common denominator). Once they are in the same form, you can then arrange the fractions in order by comparing the numerators, or you can arrange the decimals in order by comparing the digits that have the same place value.

Fill in the  $\bigcirc$  with  $<$ ,  $>$ , or  $=$ .

1  $-0.8 \bigcirc -\frac{7}{8}$

2  $\frac{1}{3} \bigcirc 0.3$

3  $\frac{4}{5} \bigcirc 0.9$

4  $0.36 \bigcirc \frac{2}{5}$

- 5 The Paper Plane Club sponsored a contest to determine who could create a paper airplane that would fly the farthest. Arthur's plane flew 21.68 feet; Huy's plane flew  $21\frac{7}{12}$  feet, and Jose's plane flew 21.75 feet. Whose plane flew the farthest?



## Unit 1 Lesson 1

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6 Arrange  $\left\{\frac{5}{6}, \frac{2}{3}, \frac{7}{9}, 0.5\right\}$  in order from least to greatest.

7 Arrange  $\left\{-2.07, -2.007, -\frac{27}{10}, -2.77\right\}$  in order from greatest to least.

8 A set of dolls of decreasing size was created so that each doll could be placed inside the next larger doll. The heights of the dolls in one set are 3 inches,  $\frac{7}{16}$  inch, 1.8 inches, 2.3 inches,  $\frac{7}{8}$  inch, and  $\frac{18}{5}$  inches. Arrange these heights in order from greatest to least.



### Mystery Fraction

Ayesha was given 3 clues concerning the value of a mystery fraction. The clues she was given are shown below.

I am a fraction between

$\frac{1}{5}$  and  $\frac{1}{4}$ .

My numerator is a  
prime number less  
than 10.

My denominator is  
10 more than my  
numerator.

What is the mystery fraction? Justify your answer.

FOR TEACHER USE ONLY:

a. YES NO Student arrives at a correct solution?

	4	3	2	1
b. Conceptual Knowledge				
c. Procedural Knowledge				
d. Communication				



## Unit 1 Lesson 1

- 1 Students were surveyed to determine how much of their homework was completed during study hall.

Homework Completion

Student	Amount Completed
Asia	0.75
Melissa	0.8
Taye	$\frac{9}{20}$
Emmitt	$\frac{3}{5}$

Which list shows the amount of homework completed in order from least to greatest?

- A 0.8, 0.75,  $\frac{3}{5}$ ,  $\frac{9}{20}$
- B  $\frac{9}{20}$ , 0.8,  $\frac{3}{5}$ , 0.75
- C  $\frac{9}{20}$ ,  $\frac{3}{5}$ , 0.75, 0.8
- D 0.75,  $\frac{3}{5}$ , 0.8,  $\frac{9}{20}$

- 2 Which decimal is between  $\frac{4}{5}$  and  $\frac{5}{6}$ ?

- A 0.8
- B 0.82
- C 0.84
- D 0.86

- 3 Customers at The Shoe Circus have a choice of discount cards. The discount cards allow customers to save  $\frac{1}{2}$ , 0.1,  $\frac{1}{5}$  and  $\frac{1}{3}$  off the regular price. Which list shows the discounts in order from least to greatest?

- A  $\frac{1}{2}$ , 0.1,  $\frac{1}{5}$ ,  $\frac{1}{3}$
- B  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{1}{5}$ , 0.1
- C 0.1,  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{1}{5}$
- D 0.1,  $\frac{1}{5}$ ,  $\frac{1}{3}$ ,  $\frac{1}{2}$





4 Which fraction is between  $-\frac{2}{5}$  and  $-\frac{1}{2}$ ?

A  $-\frac{3}{7}$

B  $-\frac{1}{4}$

C  $-\frac{3}{5}$

D  $-\frac{9}{10}$